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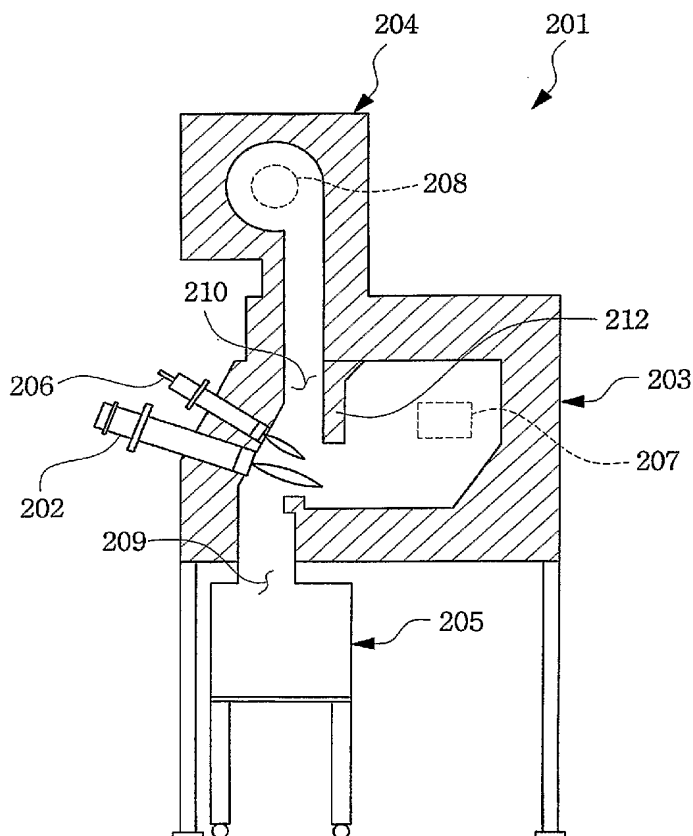
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(54) Title: CYCLONIC PLASMA PYROLYSIS SYSTEM



(57) Abstract: The present invention relates to a cyclonic plasma pyrolysis/vitrification system pyrolyzing and vitrifying waste materials into exhaust gas and slag using a plasma torch. The plasma torch circulates the exhaust gas in a main reactor with a maximum circulating power by strong plasma jet, and makes flyashes contained in the circulating exhaust gas to be melted after being adsorbed at the inner walls or in the melted materials of waste at the bottom of the main reactor by a centrifugal force. Accordingly, discharge of flyashes containing toxic materials to the outside is prevented, and pyrolysis and gasification of the waste materials are induced by circulating the exhaust gas rapidly.

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